PHASE I ADDENDUM[1]

Lead-Based Paint and/or Electrical Transformer Investigation

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INSTRUCTION for Phase I Addendum:

1. Phase I Addendum:

   1.a Phase I with Sampling Data: For a Phase I Environmental Site Assessment (Phase I) completed with Lead and/or PCB Sampling Data, the Phase I data should be organized pursuant to this Phase I Addendum table of contents format, included as an appendix to the Phase I, and referenced in the appropriate section of the Phase I.

   1.b Supplemental Site Investigation: For sites with a previous Preliminary Endangerment Assessment (PEA) determination requiring investigation of impacts from lead-based paint and/or electrical transformers, a Supplemental Site Investigation (SSI), rather than a Phase I Addendum, should be completed and submitted to the Department of Toxic Substances Control (DTSC) for review and approval. Any removal of contaminated soils from the site, for the purposes of cleanup, should be conducted under DTSC oversight in accordance with federal, state and local requirements.

   1.c Focused PEA: For sites with a previous Phase I determination requiring completion of a PEA in accordance with DTSC's "Interim Guidance for Evaluating Lead-Based Paint and Asbestos-Containing Materials at Proposed School Sites, dated July 23, 2001" (Lead Guidance), the school district may choose to submit a Phase I Addendum instead of a PEA under the regulations.

1.d Phase I Update: If a Phase I or subsequent update on site conditions was prepared more than 180 days ago, a new update (including a Phase I Addendum) on site conditions shall be submitted to DTSC for review and approval.

2. Post-Site Acquisition Investigation: If lead-based paint and/or electrical transformers are identified as the only potential sources of contamination at a proposed school site, the school district may choose to complete a Phase I without sampling and conduct a post-site-acquisition investigation of impacts from lead-based paint or electrical transformers at a later date with a Phase I Addendum submitted for DTSC review. DTSC recommends that sampling for lead in soil from lead-based paint be conducted prior to demolition of on-site structures, unless on-site structures are no longer present.

3. Sampling Strategy - Locations and Depths: DTSC may be consulted to determine the number and location of samples necessary to adequately characterize the potential impacts, in addition to the requirements specified in the regulations. Lead samples should be collected and analyzed in accordance with DTSC's Lead Guidance. PCB samples should be collected and analyzed in accordance with DTSC's "Advisory on Polychlorinated Biphenyls (PCBs)."

4. Collection of Quality Control Samples: This section should discuss collection of quality control samples to support the sampling activity. This includes field quality control (QC) samples, laboratory QC samples, confirmation samples by a fixed laboratory (if an XRF instrument is used for lead sampling and analysis), or split samples (if collected). Field QC samples include blanks and duplicates. Collection of background samples is not required because initial screening values specified below will be utilized for data interpretation and screening risk evaluation.

   Only one blank sample per matrix per day should be collected. If equipment rinsate blanks are collected (if reusable, non-disposable sampling equipment was used for the sampling event), field/container blanks and trip blanks are not required under normal circumstances. At least 10% of samples collected per event should be field duplicates for each group of analytes.

5. Soil Matrix Analytical Results:

   5.a Additional or Step-out Sampling: If elevated levels of lead and/or PCBs are identified in the soil, additional sample collection and/or analysis may be necessary to define the lateral and vertical extent of contamination.

   5.b Identification of Non-Target Compounds: If elevated levels of non-target compounds are detected, these non-target compound data should be discussed in this section and Sections 3.5 and 7.0. Non-target compounds, such as chlorinated pesticides or polycylic aromatic hydrocarbons (PAHs) have been detected during the analysis of PCB samples, using EPA Method 8270C for semi-volatile organic compounds. In addition, elevated levels of other heavy metals have been detected during the analysis of lead samples. In these cases, the non-target compound data should be discussed with DTSC before the data is included in the Phase I or Phase I Addendum and submitted for DTSC approval.

6. Field Conditions: This section should include a qualitative summary of soil conditions with appropriate description of a lithologic changes or evidence of fill material within a designated area, field variances from proposed work due to unforeseen site conditions or evaluation of raw data sets.

7. California Screening Levels and Data Interpretation: Sampling data shall be evaluated, using a DTSC-approved human health screening method, and compared with initial screening values that have been determined by DTSC to be protective of human health and the environment.

   DTSC's current Lead Guidance provides an initial screening value of 255 parts per million (ppm) for lead from lead-based paint. The residential Preliminary Remedial Goal (PRG) established by the U. S. Environmental Protection Agency Region 9 for PCBs currently is 0.22 ppm. These initial screening values are not necessarily appropriate for other types of site screening application. These initial screening values are screening indicators for sites with impacts from lead-based paint or electrical transformers only and should not be construed as a required remedial goal.

   If the highest detected concentrations do not exceed the initial screening values, sampling results may be included in the Phase I Addendum with "No Action" recommended.

   If initial screening value(s) are exceeded, the Phase I (or Phase I Addendum) shall recommend a PEA for the site. If the school district chooses to continue the project, a screening risk calculation and evaluation of sampling results shall be included in a PEA for the proposed school site as specified in Section 17213.1 of the Education Code. In this case, completion of a Phase I (or Phase I Addendum) is not necessary.

   Any Phase I or Phase I Addendum completed with risk assessment calculations (including lead spreadsheet calculations) may require a PEA.

8. Quality Assurance and Quality Control: The overall quality assurance and quality control (QA/QC) should ensure that background data collected, sampling, field and laboratory chain-of-custody, laboratory analyses, field and laboratory data measurements, and reporting activities provide data quality consistent with the intended use. As part of the project QA/QC evaluation, data validation should be performed for all submitted samples. Data quality should be defined by data quality indicators (accuracy, precision, method reporting limits, completeness, representativeness, and comparability). A summary of data validation should be included in the Phase I Addendum.

9. Implementation of Health and Safety Procedures: Describe briefly any organizational- or project-specific health and safety procedures that were followed in the field, including safety equipment and clothing used, health and safety meetings, explanation of any hazards encountered, and any instrument readings recorded. If an XRF is used for lead sampling and analysis, qualification of the XRF operator, standard operating procedures (SOP) notes and compliance with radioactive safety requirements should be discussed in this section.

10. XRF Data Report: XRF data report should include signature of manufacturer-authorized XRF technician, field logs indicating sample collection dates and times, analytical results of samples (including blanks, duplicates, and check standards), daily calibration, XRF database printouts and associated raw data.